DOCUMENT RESUME

ED C48 099 SP 004 653

AUTHOR Goldenberg, Ronald
TITLE Pupil Control Ideology and Teacher Influence in the Classroom.
PUB DATE 71
NOTE 12p.; Paper presented at annual meeting, AERA, New York, 1971.

EDRS PRICE EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS *Classroom Communication, *Discipline Policy, *Student Teacher Relationship, *Teacher Attitudes, Teacher Influence, *Verbal Communication
IDENTIFIERS Flanders Interaction Analysis, PCI, Pupil Control Ideology Form

ABSTRACT

A study investigated whether pupil control ideology of teachers differentially affected their operational behavior in the classroom. Elementary school teachers employed in a suburban St. Louis district (N=260) responded to the Pupil Control Ideology Form (PCI). From this group 20 were selected to comprise two experimental groups: those with highest scores (custodial) and those with lowest (humanistic). Flanders' interaction analysis was then used to classify the classroom verbal interaction of each teacher in the two groups during each of three 20-minute observation periods. Data was analyzed by utilizing the test of significance of a difference between proportions, z to test three null hypotheses. There was no significant difference between the proportions of indirect verbal behavior, of direct verbal behavior, or of student verbal behavior. However, the humanistic and custodial Ss in this study differed in the frequency of use of verbal behaviors categorized as 1) accepting and developing student ideas; 2) lecturing, giving facts or opinions; and 3) student-initiated verbal behaviors. In each case, the humanistic group of teachers utilized significantly more verbal behaviors classified as indirect than did the custodial group of teachers. It is therefore concluded that the pupil control ideology of the teacher does differentially affect selected verbal behavior in the classroom. (Author/JS)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
RONALD GOLDENBERG
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

ED048099

PUPIL CONTROL IDEOLOGY

AND

TEACHER INFLUENCE IN THE CLASSROOM

Research on the teaching act during the last fifty years has been dominated by studies of teacher personality characteristics and their relationship to teaching effectiveness (Domas and Tiedman, 1950; Barr, 1952; Getzels and Jackson, 1963). It appears that more and more attention is being given to the study of the behavior of teachers as they teach and of pupils as they learn.

Similarly, the behavior problems of elementary school age children are a subject of increasing interest and concern. Success and failure of teachers are frequently reported in terms of pupil control. The maintaining of order and discipline is rated at the top of problems teachers considered to be their major difficulties (Nelson and Thompson, 1963).

In any event, pupil control, the perception of pupil misbehavior and subsequent teacher selected techniques for prevention or treatment appear to be an integral part of teaching behavior in the public school. Teacher-pupil control typology may vary from custodial to humanistic as discussed by Willower, Eidell, and Hoy (1967, p. 4) who stated:

> Teachers may emphasize punitive sanctions, coercion, and ridicule as well as witholding rewards to gain compliance to arbitrary standards set by the teacher or the organization. Or sensitive teachers may appeal to the individuals' senses of right and wrong, his self-discipline in a non-punitive, understanding, and supportive manner to achieve behavior norms and role expectation.

SP004653

Since appropriate pupil control is vital to success in teaching elementary school age children it seems appropriate to ask: do teachers differ in their beliefs about what constitutes pupil control in the elementary school and do these beliefs influence the type of instructional methodology used in the classroom?

The Problem

The central problem of this study was to analyze whether the pupil control orientation of teachers differentially affected their operational behavior in the classroom setting.

Specifically, answers to the following questions were sought: 1) Is there a difference between a teacher-pupil control ideology and the type of teacher influence exerted over pupils in the classroom? 2) Is there a difference between teachers' pupil control ideology and the type of verbal behavior of their pupils? The following null hypotheses were generated from the preceeding questions:

1) Humanistic and custodial teachers do not differ in the degree of indirect verbal behavior exhibited in the classroom.

2) Humanistic and custodial teachers do not differ in the degree of direct verbal behavior exhibited in the classroom.

3) Pupil verbal behavior in the classroom does not differ for those pupils taught by humanistic teachers and those taught by custodial teachers.

Method

During the first part of the spring semester 1970, 260 elementary school teachers employed by a suburban St. Louis school district were asked to respond to the Pupil Control Ideology Form (Willower, Eidell and Hoy, 1967). This instrument contains twenty statements to which the teacher circles his response. The responses can range from "strongly agree" to "strongly disagree." The Likert-type scale yields a score which reflects the degree of

humanistic or custodial pupil control ideology a teacher possesses. The lower the score, the more humanistic the ideology of the respondent.

Of the original 260 subjects to whom the PCI was administered, the ten who scored the highest were selected to comprise the custodial group. The ten teachers who scored the lowest on the PCI comprised the humanistic group. The mean PCI scores for these two groups were significantly different ($p < .001$). (See Table 1.)

Table 1.--A Comparison of Pupil Control Ideology Scores For The Two Experimental Groups

Group A Custodial	Group B Humanistic
$\Sigma A = 669$	$\Sigma B = 343$
Mean $(\bar{A}) = 66.9$	Mean $(\bar{B}) = 34.3$
$N = 10$	$N = 10$

$t = 23.521$ (two-tailed) $df = 18$ $p < .001$

These two groups, widely divergent with regard to expressed pupil control ideology, were the subjects for this study. Although the groups were significantly different with regard to pupil control ideology they were similar with respect to selected demographic factors. (See Table 2)

The Flanders Interaction Analysis Scale was utilized to classify the classroom verbal interaction of each teacher in the two experimental groups. Each teacher was observed three times. The duration of each observation was twenty minutes. Flanders (1968) states "Twenty minutes, or about 400 tallies, provide a matrix with sufficient data for a number of inferences about verbal communication."

The Flanders Scale consists of ten categories. Each three seconds, the verbal interaction in the classroom is recorded in one of the ten categories. Categories 1-4 represent the indirect verbal statements of the teacher.

Table 2 -DEMOGRAPHIC DATA FOR TEACHERS
WHO COMPRISED THE EXPERIMENTAL GROUPS

Custodial					Humanistic				
Teacher	Sex	Grade Taught	Years Experience	Age Range	Teacher	Sex	Grade Taught	Years Experience	Age Range
1	F	6	1	20-29	11	F	5	1	20-29
2	F	3	4	30-39	12	F	3	2	20-29
3	M	6	9	30-39	13	F	1	1	20-29
4	F	2	2	20-29	14	F	5	20	40-49
5	F	4	1	20-29	15	F	5	5	20-29
6	F	4	10	40-49	16	F	4	3	20-29
7	F	3	7	20-29	17	F	1	2	20-29
8	F	2	8	40-49	18	F	4	10	30-39
9	M	6	19	40-49	19	F	1	2	20-29
10	M	6	8	20-29	20	M	6	9	30-39
Mean Grade Level:	4	Mean Years Exper.:	6	Mean Age: 33	Mean Grade:	3	Mean Exp.:	5.5	Mean Age: 29

Categories 5-7 indicate the direct verbal statements of the teacher. Pupil verbal behavior is categorized as either eight or nine. Category 8 represents pupil response to teacher statements. Pupil initiated verbal behavior is classified in category nine. Silence or confusion is classified in category ten.

Three independent observers (college graduates) were employed to observe the pupil teacher verbal interaction in each Ss classroom. A blind technique was utilized to insure that the observers did not know why the teachers were being observed nor the experimental identity of the teachers. The observers were trained in the Flanders technique by the investigator. Table 3 reports the data for observer reliability.

Table 3.--Flanders Interaction Analysis
Observer Reliability*

Observers	Prior	During	After
A x B	.887	.846	.869
A x C	.885	.833	.830
B x C	.879	.796	.799

Only language arts classes were observed since this was a subject commonly taught by all the teachers in the study.

The Flanders interaction analysis data for this study was analyzed by utilizing the test of significance of a difference between proportions, z (Guilford, 1965, pp. 185-187). To test the null hypothesis concerning differences between the experimental groups on indirect verbal behavior in the

*Observer reliability during the course of the investigation was computed by Scott's Coefficient:

$$\pi = \frac{Po-Pe}{100-Pe}$$

(Flanders, p. 13)

classroom, the total tallies for categories one through four were divided by the total tallies for categories one through seven (I/D Ratio = 1 - 4 ÷ 1 - 4 + 5 - 7). The resultant quotients represented the proportion of indirect teacher statements for each experimental group (I/D Ratio). Table 4 reports the results of this analysis.

Table 4.--Test of Significant of A Difference Between Proportions For Indirect Teacher Influence In The Classroom

Group A Custodial	Group B Humanistic
Total Tallies Categories 1-4 = 2300	Total Tallies Categories 1-4 = 3342
Total Tallies Categories 1-7 = 8400	Total Tallies Categories 1-7 = 6063
Indirect Ratio = 2300 ÷ 8400 = .27	Indirect Ratio = 3342 ÷ 6063 = ..55

$\bar{z}$ = 1.55 (not significant)

The computed $\bar{z}$ for the comparison of indirect verbal behavior of the two experimental groups was not significant ($\bar{z}$ = 1.55), therefore, the first null hypothesis could not be rejected.

Flanders (1966, p. 26) states that the 3-3 cell (teacher accepts and develops student ideas) is by far the most important in estimating the teacher's support of student participation. According to Flanders this "... means that the teacher develops the ideas of students with considerable care ---- a mark of a truly indirect pattern of influence." If this is true, perhaps the most meaningful indication of the teacher's indirectness in the classroom is the number of frequencies of the 3-3 cell tallies on the Flanders Scale. An analysis of the 3-3 cells for the two groups in the study is reported in Table 5.

Table 5.--A Comparison of 3-3 Cell Tallies

Group A Custodial	Group B Humanistic
$\Sigma A = 96$ Mean $(\overline{A}) = 9.6$ $N = 10$	$\Sigma B = 333$ Mean $(\overline{B}) = 33.3$ $N = 10$

$t = 5.3127$ (two-tailed) $df = 18$ $p < .001$

When the 3-3 cell tallies for the two experimental groups were compared, a t value of 5.3127 was obtained ($p < .001$, $df = 18$). The humanistic group of teachers evidenced significantly greater acceptance and development of the students' ideas.

Although there was no difference in the proportion of indirect verbal behavior of the humanistic and custodial teachers there was a significant difference in the number of times the two groups accept and develop student ideas. Flanders indicates that the acceptance and development of student ideas (3-3 cell) is the best indication of the indirectness of a teacher. Accepting Flanders' definition of indirectness, the humanistic teachers in this investigation were more indirect in their classroom verbal behavior than the custodial teacher group.

To test the null hypothesis concerning differences between the experimental groups for direct teacher influence in the classroom, the total tallies for categories one through seven (Direct verbal behavior proportion: 5 - 7 ÷ 1 - 7). Direct teacher verbal statements are contained in categories five through seven. The data for the proportion of direct verbal behavior is reported in Table 6.

Table 6.--Test Of Significance Of A Difference Between Proportions For Direct Teacher Influence In The Classroom

Group A Custodial	Group B Humanistic
Total Tallies Categories 5-7 = 6140	Total Tallies Categories 5-7 = 2621
Total Tallies Categories 1-7 = 8440	Total Tallies Categories 1-7 = 6063
Proportion Direct = 6140 ÷ 8440 = .727	Proportion Direct = 2621÷6063=.432

$\bar{z}$ = 1.207 (not significant)

The computed $\bar{z}$ for the comparison of direct verbal behavior for the two experimental groups was not significant. Therefore, the second null hypothesis could not be rejected. Flanders (1966, p. 4) states that direct influence (categories 5, 6, and 7) increases the actual control of the teacher and often stimulates conformity and compliance. This is the characteristic of a custodial pupil control ideology. To lecture (5-5 cell) he continues, focuses the attention of the student's own ideas on the teacher. When the 5-5 cell tallies for the two experimental groups was compared, a t value of 2.969 was obtained ($p < .01$, Df = 18). A summary of the data for the 5-5 cell for the two groups is reported in Table 7.

Table 7.--A Comparison Of 5-5 Cell Tallies

Group A Custodial	Group B Humanistic
ΣA = 2671	ΣB = 1269
Mean ($\bar{A}$) = 267.1	Mean ($\bar{B}$) = 126.9
N = 10	N = 10

t = 2.969 (two-tailed) df = 18 $p < .01$

The pupil verbal interaction hypothesis (3) was tested using categories 8-9 which represent the total pupil talk dimension of classroom verbal behav-

ior. The total tallies for categories 8 and 9 were divided by the total tallies for categories one through nine (8-9 ÷ 1-9). Category eight represents teacher initiated student talk. A summary of the data for these two categories is reported in Table 8.

Table 8.--A Comparison Of The Two Experimental Groups For The Pupil Behavior Dimension On The Flanders Interaction Analysis Scale

Group A Custodial	Group B Humanistic
Total Tallies Categories 8-9 = 3113	Total Tallies Categories 8-9 = 6087
Total Tallies Categories 1-9 = 11,553	Total Tallies Categories 1-9 = 12140
Proportion Pupil Talk = 8-9÷1-9=.269	Proportion Pupil Talk = 8-9÷1-9=.501

$\bar{z}$ = 1.06 (not significant)

A computed $\bar{z}$ for the comparison of student verbal behavior for the two experimental groups was not significant. The third null hypothesis was not rejected. However, a further analysis of the differences in verbal interaction between the two groups in the investigation revealed that the experimental groups differed in the kinds of pupil verbal interaction in their classrooms. Category eight represents teacher initiated pupil talk. No significant difference was found to exist between the two groups for the 8-8 cell dimension of pupil verbal behavior.

Flanders points out that high loadings in the 9-9 cells indicate greater student self-direction. This self-direction is hypothesized to be the result of the teacher's indirect influence. An analysis of the 9-9 cells for the two groups in the study is reported in Table 9.

Table 9.--Summary Of The Data For A Test of Significant Differences Between The Two Experimental Groups For Pupil Initiated Pupil Talk (9-9 Cell)

Group A Custodial	Group B Humanistic
$\Sigma A = 411$	$\Sigma B = 1468$
Mean $(\bar{A}) = 41.1$	Mean $(\bar{B}) = 146.8$
$N = 10$	$N = 10$

$T = 3.482$ (two-tailed) $Df = 18$ $p < .01$

When the 9-9 cell tallies for the two experimental groups were compared, a t value of 3.482 was obtained ($p < .01$, $Df = 18$).

The incidence of pupil initiated verbal interaction was significantly greater in the classrooms of the humanistic teachers than in the classrooms of the custodial teachers.

Although there was no difference in the proportion of student verbal behavior in the classrooms of the humanistic and custodial teachers, there was a significant difference in the incidence of student initiated verbal interactions. Student initiated verbal behavior, according to Flanders, is an indication of student self-direction. In this study, the humanistic teacher encouraged significantly greater student self-directed verbal behavior than did the custodial teachers.

Summary

This investigation was undertaken to determine if the pupil control ideology of teachers differentially affected their operational behavior in the classroom setting.

There was no significant difference between the proportion of indirect verbal behavior for the humanistic and custodial teachers. However, humanistic teachers utilized a significantly greater number of verbal behaviors categorized as accepting and developing student ideas (3-3 cell).

There was no significant difference between the proportion of direct verbal behavior for humanistic and custodial teachers, however, custodial teachers utilized a significantly greater number of verbal behaviors categorized as lecture and giving facts or opinions about content or procedure.

The proportion of student talk was not significantly different for the humanistic and custodial teachers. The incidence of pupil initiated talk (9-9 cell) was significantly greater for the humanistic teacher group.

When the broad categories of the Flanders Interaction Analysis Scale were analyzed, there appeared to be no differences between the two experimental groups. However, the general nature of the responses in the broad categories may have masked actual differences between the two groups. When an analysis of single cell categories was computed the two experimental groups were significantly different with regard to selected key cells which Flanders considered to be indicative of the direct--indirect dimension of verbal behavior.

Specifically, the humanistic and custodial Ss in this study differed in verbal behaviors categorized as 1) accepting and developing student ideas (3-3 cell); 2) lecturing giving facts or opinions (5-5 cell); 3) student-initiated verbal participation (9-9 cell).

In each case, the humanistic teachers utilized significantly more verbal behaviors classified as indirect than did the custodial teachers.

It is therefore concluded that the pupil control ideology of the teacher does differentially affect selected verbal behavior in the classroom.

REFERENCES

Barr, A. S., "The Measurement of Teacher Characteristics and Prediction of Teaching Efficiency", Review of Educational Research, Vol. XXII (June, 1952)

Domas, S. J. and D. V. Teidman, "Teacher Competance: An Annotated Bibliography", Journal of Experimental Education, Vol. XIX (December, 1950)

Flanders, N. A., "Interaction Analysis and In-Service Training," Journal of Experimental Education, Vol. 37 (Fall 1968).

Flanders, N. A.,Interaction Analysis in the Classroom, A Manual For Observers (Ann Arbor: University of Michigan, 1966)

Getzels, J. W. and P. W. Jackson, "The Teacher's Personality and Characteristics", in N. L. Gage (Ed.) Handbook of Research on Teaching, Chicago: Rand McNally Company, 1963.

Nelson, L. "Teacher Leadership: An Empirical Approach to Analyzing Teacher Behavior in the Classroom", Journal of Teacher Education, Vol. XVII (Winter, 1966)

Willower, D. L., T. L. Eidell and W. K. Hoy, The School and Pupil Control Ideology, The Pennsylvania State University Studies, No. 24. (University Park: The Pennsylvania State University, 1967)